

## CLAIMS

1. A buckle assembly including an upper case, a lower case coupled with the upper case and including a position determining projection for determining the position of a multi-purpose buckle sensor assembly, ribs for supporting the front portion of the multi-purpose buckle sensor assembly and first and second supporting blocks each positioned on the front portion of a terminal block and inserted in a groove portion of the terminal block, a release button coupled to the frame for unlatching a locking bar of a locking lever from a tongue, an ejector elastically and movably supported in a sliding aperture for discharging the tongue latched to a locking bar of a locking lever out of outside responsive to the release button, the locking lever including a slider elastically and movably mounted on a guide surface thereof and for being pivoted at one end portion and latching or unlatching the tongue at the other end portion, a frame including a coupling groove for determining the position to be coupled with the multi-purpose buckle sensor assembly and a coupling surface to be engaged with a hook portion of a base plate and for supporting the ejector on a bottom thereof, supporting the slider against the inner upper surface of an arched supporting beam thereof and pivotally rotating the locking lever at its rear end is characterized in that:

a multi-purpose buckle sensor assembly comprises a hall sensor portion including a hall sensor and a printed circuit board electrically connected to each other, which are enclosed in one package;

a base plate including a metal pattern with a plurality of terminal portions for control signal and power sources of a positive voltage and a negative voltage, the terminal portion having a certain pattern adaptable formed adjacent a terminal block to an electronic circuit, and a supporting plate including a plurality of terminal seats for connecting the connecting ends of control and power lines to the terminal portions;

a movable member including guiding means for freely moving it on the base plate cooperating with the ejector, a first permanent magnet mounted at its center portion and a pair of contact terminals mounted on its lower surface and for being traveled on the metal pattern contacting with at least one patterns of the metal pattern; and,

a terminal block made of a heat-melted in the form of a fork having three branches at the front portion and including at least one portions enclosing the connecting ends of the control and power lines electrically coupled to each

another with the control terminal portions in corresponding power terminal seats.

2. The seatbelt buckle apparatus of Claim 1 characterized wherein:

the hall sensor is electrically connected to the printed circuit board to form a certain control circuit, in which the printed circuit board is electrically coupled with at least one pattern of terminal portions of the metal pattern.

3. The seatbelt buckle apparatus of Claim 1 characterized wherein:

the movable member includes at least two contacting terminals for generating various control signals and the first permanent magnet oriented in the same pole as a second permanent magnet mounted on the center of the ejector to be cooperated with the hall sensor.

4. The seatbelt buckle apparatus of Claim 1 characterized wherein:

the terminal block is heat-molded into a heat-melted material of a lower temperature with control and power lines contained, in which the connection ends of the lines and correspond terminal portion are placed on their corresponding terminal seat.

5. The seatbelt buckle apparatus of Claim 1 characterized wherein:

any one of the first and second permanent magnets is used to be cooperated with the hall sensor portion.